

CLAIMS

1. A preventive or therapeutic agent for diseases accompanied by abnormal vascular function in which lipid deposition in the blood vessel is involved, said agent comprising a chymase inhibitor as an active ingredient.

2. The preventive or therapeutic agent according to claim 1, wherein the diseases accompanied by abnormal vascular function in which lipid deposition in the blood vessel is involved are arteriosclerosis, cardiac acute coronary syndrome, restenosis after percutaneous transluminal coronary angioplasty, obstructive arteriosclerosis, obstructive thrombotic vasculitis, atherosclerosis, cerebral infarction, intermittent claudication, lower limb gangrene, renal vascular hypertension, renal arterial aneurysm, and renal infarction.

3. A preventive or therapeutic pharmaceutical composition for diseases accompanied by abnormal vascular function, wherein the chymase inhibitor is blended at an amount that suppresses lipid deposition in the blood vessel.

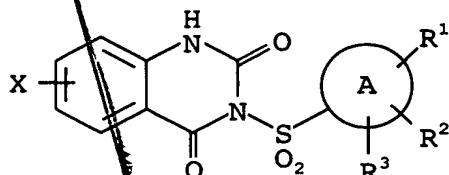
4. The preventive or therapeutic pharmaceutical composition according to claim 3, wherein the diseases accompanied by abnormal vascular function are arteriosclerosis, cardiac acute coronary syndrome, restenosis after percutaneous transluminal coronary angioplasty, obstructive arteriosclerosis, obstructive thrombotic vasculitis, atherosclerosis, cerebral infarction, intermittent claudication, lower limb gangrene, renal vascular hypertension, renal arterial aneurysm, and renal infarction.

5. A suppressing agent of lipid deposition in the blood vessel comprising a chymase inhibitor as an active ingredient.

6. The preventive or therapeutic agent according to claim 1 or 2, wherein said chymase inhibitor is a quinazoline derivative represented by the formula (1):

control  
B2  
S6 A1

5



(1)

wherein, the ring A represents an aryl ring,  
R<sup>1</sup> represents a hydroxy group, an amino group, or a  
lower alkylamino group having 1 to 4 carbons that may be  
10 substituted with a carboxylic group, a lower aralkylamino  
group having 7 to 10 carbons that may be substituted with  
a carboxylic group, an amino group acylated with a lower  
fatty acid having 1 to 4 carbons that may be substituted  
15 with a carboxylic group, an amino group acylated with an  
aromatic carboxylic acid that may be substituted with a  
carboxylic group, an amino group acylated with a  
heteroaromatic carboxylic acid that may be substituted  
with a carboxylic group, an amino group sulfonylated with  
a lower alkanesulfonic acid having 1 to 4 carbons that  
20 may be substituted with a carboxylic group, an amino  
group sulfonylated with an aromatic sulfonic acid that  
may be substituted with a carboxylic group, an amino  
group sulfonylated with a heteroaromatic sulfonic acid  
that may be substituted with a carboxylic group, a lower  
25 alkyl group having 1 to 4 carbons substituted with a  
carboxylic group, or a lower alkylene group having 2 to 4  
carbons substituted with a carboxylic group;

R<sup>2</sup> and R<sup>3</sup>, which may be the same or different,  
30 represent a hydrogen, a lower alkyl group having 1 to 4  
carbons that may be substituted, a halogen atom, a  
hydroxy group, a lower alkoxy group having 1 to 4  
carbons, an amino group, a lower alkylamino group having  
1 to 4 carbons that may be substituted, a lower  
aralkylamino group having 7 to 10 carbons that may be  
35 substituted, an amino group acylated with a lower fatty  
acid having 1 to 4 carbons that may be substituted with a  
carboxylic group, an amino group acylated with an

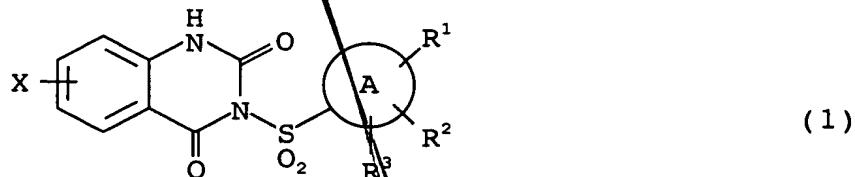
aromatic carboxylic acid that may be substituted with a carboxylic group, an amino group acylated with a heteroaromatic carboxylic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a lower alkanesulfonic acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group sulfonylated with an aromatic sulfonic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a heteroaromatic sulfonic acid that may be substituted with a carboxylic group, or a carboxylic group, or

when the ring A is a benzene ring, R<sup>1</sup> and R<sup>2</sup>, together with the benzene ring to be substituted, may form a fused heterocyclic ring that may be substituted with a carboxylic acid, and a carbon atom in said fused heterocyclic ring may form a carbonyl group wherein R<sup>3</sup> is as defined above; and

X represents a hydrogen atom, a lower alkyl group having 1 to 4 carbons, a lower alkoxy group having 1 to 4 carbons, a halogen atom, a hydroxy group, an amino group, or a nitro group;

or a pharmaceutically acceptable salt thereof.

7. The pharmaceutical composition according to  
claim 3 or 4, wherein said chymase inhibitor is a  
25 quinazoline derivative represented by the formula (1):



wherein, the ring A represents an aryl ring,

35 R<sup>1</sup> represents a hydroxy group, an amino group, or a lower alkylamino group having 1 to 4 carbons that may be substituted with a carboxylic group, a lower aralkylamino group having 7 to 10 carbons that may be substituted with a carboxylic group, an amino group acylated with a lower

fatty acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group acylated with an aromatic carboxylic acid that may be substituted with a carboxylic group, an amino group acylated with a heteroaromatic carboxylic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a lower alkanesulfonic acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group sulfonylated with an aromatic sulfonic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a heteroaromatic sulfonic acid that may be substituted with a carboxylic group, a lower alkyl group having 1 to 4 carbons substituted with a carboxylic group, or a lower alkylene group having 2 to 4 carbons substituted with a carboxylic group;

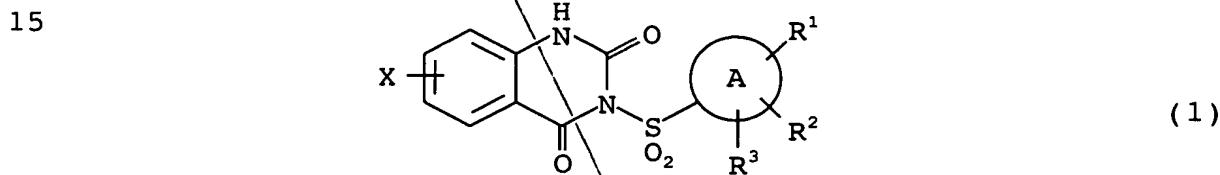
$R^2$  and  $R^3$ , which may be the same or different, represent a hydrogen, a lower alkyl group having 1 to 4 carbons that may be substituted, a halogen atom, a hydroxy group, a lower alkoxy group having 1 to 4 carbons, an amino group, a lower alkylamino group having 1 to 4 carbons that may be substituted, a lower aralkylamino group having 7 to 10 carbons that may be substituted, an amino group acylated with a lower fatty acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group acylated with an aromatic carboxylic acid that may be substituted with a carboxylic group, an amino group acylated with a heteroaromatic carboxylic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a lower alkanesulfonic acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group sulfonylated with an aromatic sulfonic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a heteroaromatic sulfonic acid that may be substituted with a carboxylic group, or a carboxylic group; or

when the ring A is a benzene ring,  $R^1$  and  $R^2$ ,

together with the benzene ring to be substituted, may form a fused heterocyclic ring that may be substituted with a carboxylic acid, and a carbon atom in said fused heterocyclic ring may form a carbonyl group wherein R<sup>3</sup> is as defined above; and

X represents a hydrogen atom, a lower alkyl group having 1-4 carbons, a lower alkoxy group having 1 to 4 carbons, a halogen atom, a hydroxy group, an amino group, or a nitro group;  
or a pharmaceutically acceptable salt thereof.

8. The suppressing agent of lipid deposition according to claim 5, wherein said chymase inhibitor is a quinazoline derivative represented by the formula (1):



20 wherein, the ring A represents an aryl ring,  
R<sup>1</sup> represents a hydroxy group, an amino group, or a lower alkylamino group having 1 to 4 carbons that may be substituted with a carboxylic group, a lower aralkylamino group having 7 to 10 carbons that may be substituted with a carboxylic group, an amino group acylated with a lower fatty acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group acylated with an aromatic carboxylic acid that may be substituted with a carboxylic group, an amino group acylated with a heteroaromatic carboxylic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a lower alkanesulfonic acid having 1 to 4 carbons that may be substituted with a carboxylic group, an amino group sulfonylated with an aromatic sulfonic acid that may be substituted with a carboxylic group, an amino group sulfonylated with a heteroaromatic sulfonic acid that may be substituted with a carboxylic group, a lower  
25  
30  
35

Add  $B^3$